



**Quality Assurance Unit**



**Tanta University  
Faculty of Medicine**

**Department of Medical Parasitology  
Program Specifications**

**Medical Parasitology Doctorate  
Degree**

**2016-2017 (para900)**

Medical Parasitology Doctorate degree, Program specifications  
**University: Tanta    Faculty: Medicine    Department: Medical Parasitology**

### **A- Basic information**

**1-Program title: Doctorate of Medical Parasitology**

**2-Program Code: PARA-900**

**3- Program coordinator: Prof. Dr. Kholoud El-Nouby**

**4-program internal evaluators: Prof. Dr. Sanaa Antonios**

**5-program external evaluators: Professor Dr. Mammdouh Meselhy. Mansoura Faculty.**

**6-Date of approval: 1/11/2016**

**7-Departments offering the courses of the program: Parasitology and Microbiology departments Faculty of medicine Tanta University.**

### **B\_ professional information**

#### **1 - Overall program aims**

The program aims to prepare a graduate having the ability to perform and perfect the bases and methods of medical research, and teach others and transfer of his medical experience to them through providing broad spectrum of knowledge and skills in Medical Parasitology so he gain a positive attitude towards:-

- Awareness about the epidemiology and biology of endemic and non-endemic parasites and its impact on human health.
- Wide-scale knowledge about diagnostic work-up of parasitic diseases.
- Mastering of up-to-date lines of management of different parasitic infections.
- Awareness towards the current medical problems, and up to date hypothesis in Medical Parasitology
- Orientation about his role in community development, and environmental safety

#### **2 - Intended learning outcomes (ILOs):**

##### **a-Knowledge and understanding:**

**By the end of the program the candidate will be able to:**

- a.1- describe the epidemiology of medically important parasites and explain the factors determining such distribution and their socioeconomic impact on the community
- a.2- Identify the medically important parasites, with the host parasite relationship.

- a.3-Recognize the various aspects of the parasites and their diseases (taxonomy, life cycle, pathology and pathogenesis, clinical aspects, treatment and expected complication)
- a.4-Describe the recent aspects of diagnosis and treatment.
- a.5-Discuss immunological and molecular biological aspects of parasitic infections.
- a.6- Mention the methods of prevention and control of infection on individual community levels.
- a.7-Recognize the principles and ethics of medical research and practice

**b. Intellectual skills:**

**By the end of the program the candidate will be able to:**

- b.1- Analyze medical problems related to parasitic infections with differentiation between parasitic diseases.
- b.2-Correlate clinical manifestations with the causative parasites and their pathogenesis.
- b.3-Formulate and rearrange dispersed data related to parasitic infections and to be able to present them in a clear concise form.
- b.4-Choose the suitable diagnostic techniques concerning the parasite problems encountered (microscopy, serology, or molecular...etc)
- b.5-Design and perform an advanced and innovative research in medical Parasitology.
- b.6-Suggest applicable prevention and control programs

**c. Professional and practical skills:**

**By the end of the program the candidate will be able to:**

- c.1-Perform the basic and modern professional skills in the area of diagnostic Medical Parasitology.
- c.2- Assess and establish updated diagnostic strategies.
- c.3-Write and evaluate a professional medical report for practical Parasitology.
- c.4-Perfect microscopic examination and staining of different medical parasite stages.
- c.5-Perfect manipulation of infectious material in a lab or hospital in a safe way.
- c.6-Examine laboratory specimens (body fluid, excreta or infected tissues) using recent technological tools

**d. General and transferable skills:**

**By the end of the program the candidate will be able to:**

- d.1- Director share in a teamwork aiming at solving an environmental problem
- d.2- Use the update methods and technology for obtaining and transferring scientific data
- d.3- Arrange with community authorities for planning and achieving a field plan to combat an environmental health problem

- d.4- Perform continuous medical educations
- d.5-Write the scientific article according to the basics of scientific research.
- d.6- Achieve computer skills necessary to make use of medical databases and use the internet for communication.
- d.7-Manage scientific seminars, with good time management

### **3- Academic standards adopted**

Bench mark : New York University Medical center (NYU School of Medicine)  
Academic standards for postgraduates offered for 2009 by  
the Egyptian Authority for Quality Assurance and Accreditation for Education (NAQAEE) and adopted by the faculty council for medical degrees in 24/5/2010

#### ***By end of the program graduate should be able to***

- Perfect the bases and methods of medical researches
- Apply his medical knowledge and merge it with related knowledge.
- Be oriented with the current medical problems and up dates in the field of Parasitology.
- Detect professional problems in the field of Parasitology and suggest solutions
- Perfect professional skills, and use of technological tools needed in his practice
- Decision making through analysis of available information
- Be oriented with his role in community development , and environmental safety
- Realize the importance of self development and continuous medical education
- Be involved in supervised training and skill transfer to younger researchers

### **4 – Curriculum structure and content:**

**4-a- Program duration:48 months a total of 88 credit hours.**

**4-b- Program structures:**

**1<sup>st</sup> part:** (for 12 months after registering to the degree, 2 semesters for 18 credit hours) after that the student enter the exam and it is not necessary to succeed in this examination completely to register to the thesis or to register to the second part)

**Thesis:** in the schedule research plan of the department, for 16 credit hours, student will be able to register for the thesis after the end of the first semester of the first part. The student will be able to discuss the thesis at least 2 years from the date of registration and at least two months before the date of the exams of the second part.

**2<sup>nd</sup> part :**(for 36 months; 6 semesters for 54 credit hours). The student should be satisfactorily complete 75% of their logbook to be eligible to enter the written, oral, and clinical examination of the second part to get the degree.

المناهج			
النقاط المعتمدة	الساعات المعتمدة	الكود	المقرر الدراسي
21	7	PARA 9001	1. مقرر علمي وعملي في أساسيات علم الطفيليات الطبية.
21	7	PARA 9002	2. مقرر علمي وعملي في مبادئ المناعة والبيولوجيا الجزيئية.
6	2		مقررات اختيارية.
4	2		أنشطة علمية.
32	16		الرسالة
21	7	PARA 9003	1. مقرران علميان وعمليان في علم الديدان الطبية.
10½	3½	PARA 9004	
21	7	PARA 9005	2. مقرران علميان وعمليان في علم الطفيليات وحيدة الخلية.
10½	3½	PARA 9006	
21	7	PARA 9007	3. مقرران علميان وعمليان في علم الحشرات الطبية.
10½	3½	PARA 9008	
21	7	PARA 9009	4. مقرران علميان وعمليان في المناعة والبيولوجيا الجزيئية
10½	3½	PARA 9010	الخاصة بالطفيليات الطبية.
18	6		مقررات اختيارية.
12	6		أنشطة علمية.
240	88		المجموع

## 5-Courses included in the program:

### 5.1 Courses titles

Code	Course Title	Theoretical	Training course	Total hours / course	Remarks	Program ILOs Covered
PAR A 9001	Medical parasitology	4	3	7	First part	A 1,a2,a3,a4,a5 a6 B1,2,3,4,5,6 C1,2,3,4,5,6 D1,3,4,7
PAR A 9002	Basic immunology and molecular biology	4	3	7		A.5 B.2,4 C1,2,6 D1,2,3
PAR A 900	Elective courses			2	1 in each semester	a.7,B5, d1→d6
PAR A 900	Scientific activity			2	One in each semester	d.1,2,3,4,5,6,7
PAR A 900	Thesis			16		a.7,B5, d1→d6
PAR A 9003	Medical helminthology	4	3	7		A 1,a2,a3,a4,a5 a6

PAR A 9004	Medical helminthology	2	1 1/2	3 1/2	Second part (8 semesters)	B1,2,3,4,5,6 C1,2,3,4,5,6 D1,3,4,7
PAR A 9005	Medical Protozoology	4	3	7		A 1,a2,a3,a4,a5 a6
PAR A 9006	Medical protozoology	2	1 1/2	3 1/2		B1,2,3,4,5,6 C1,2,3,4,5,6 D1,3,4,7
PAR A 9007	Medical Entomology	4	3	7		A 1,a2,a3,a4,a5 a6
PAR A 9008	Medical Entomology	2	1 1/2	3 1/2		B1,2,3,4,5,6 C1,2,3,4,5,6 D1,3,4,7
PAR A 9009	Immunology & Molecular biology	4	3	7		A.5 B.2,4 C1,2,6 D1,2,3
PAR A 9010	Immunology & Molecular biology	2	1 1/2	3 1/2		
PAR A 900	Elective courses			6		1 in each semester
PAR A 900	Scientific activity			6	One in each semester	d.1,2,3,4,5,6,7
Total				88		

Detailed courses and curricula are annexed

Taught (credit) hours (total of the program) :

Lectures :32 (480) Practical : 24(720) thesis:16

Elective courses (8) (are annexed and the students will choose 1 of them for each semester) Scientific activities (8) **Total 88 credit h**



program ILOs versus courses ARS																																					
ARS	A					b									c					D																	
	1	2	3	4	5	1	2	3	4	5	6	7	8	9	1	2	3	4	5	1	2	3	4	5	6	7											
ILOS																																					
6															√			√																			
1																										√										√	
2																											√									√	
3																										√										√	
d 4																												√	√								
5																													√								
6																														√							
7																																				√	

#### 6. Program admission requirements:

Postgraduate students with a M.Sc. or an equivalent degree in applied Parasitology.

#### 7. Regulation for progression and program completion

Registration, progress requirements, and schedule of written exams are provided by the faculty post graduate bylaws provided to all students through post graduate guide book (paragraphs no. 51-57, 59)

#### 8-Program assessment and evaluation:

الامتحانات						المناهج					
مجموع الدرجات	اكلينيكي	شفوي	عملي	تحريري	عدد الاوراق	النقاط المعتمدة	الساعات المعتمدة	الكود	المقرر الدراسي		
150		30	30	90	1	21	7	PARA 9001	1. مقرر علمي وعملي في أساسيات علم الطفيليات الطبية.		
150		30	30	90	1	21	7	PARA 9002	2. مقرر علمي وعملي في مبادئ المناعة والبيولوجيا الجزيئية.		
						6	2		مقررات اختيارية.		
						4	2		أنشطة علمية.		
						32	16		الرسالة		
1200		240	240	360	1	21	7	PARA 9003	1. مقرر علميان وعمليان في علم الديدان الطبية.		
				360	1	10½	3½	PARA 9004	2. مقرر علميان وعمليان في علم الطفيليات وحيدة الخلية.		
						21	7	PARA 9005	3. مقرر علميان وعمليان في علم الحشرات الطبية.		
						10½	3½	PARA 9006	4. مقرر علميان وعمليان في المناعة والبيولوجيا الجزيئية الخاصة بالطفيليات الطبية.		
						21	7	PARA 9007	مقررات اختيارية.		
						10½	3½	PARA 9008	أنشطة علمية.		
						21	7	PARA 9009			
						10½	3½	PARA 9010			
						18	6				
						12	6				
1500		300	300	900		240	88		المجموع		



## Evaluation

- Program external evaluator: Professor Dr. MammdouhMeselhy.
  - Program Internal evaluator : Professor Dr. SanaaAntonios
  - Reports of external and internal evaluators(attached separately). Students have the role of active learners and have the responsibility of attending and actively participating in all students learning experiences.i.e. lectures, practical classes and discussions. They also carry out independent study as will benefit their learning towards the objectives of the course.
  - Questioners to students and stakeholders (attached separately).
  - Reports of faculty internal auditing system (attached separately).
- Will be included in the annual program report, and action plan will be structured accordingly

## -Appendix courses specifications

will be supplied in beginning of each semester .This course will be available in the Department Secretary office as well as class schedules, lecture notes and any notices regarding examinations and any change in the class schedule.

### المقررات الاختيارية لدرجات الدبلوم والماجستير والدكتوراه

أولاً : مقررات في أساسيات البحث العلمي

Code	Title	Weeks	Didactic Hours	Practical Hours	Contact Hours	Self Study Hours	Workload	Student Workload	Credit Hours	Credit Points
MEDC 101	Evidence Based Medicine	15	1	0	1	4	5	75	1	3
MEDC 102	Systematic Review and Meta-analysis	15	1	0	1	4	5	75	1	3
MEDC 103	Study Design and Clinical Trials	15	1	0	1	4	5	75	1	3
MEDC 104	Scientific Writing and International Publication	15	1	0	1	4	5	75	1	3
MEDC 105	Biostatistics and Medical Informatics	15	1	0	1	4	5	75	1	3
MEDC 106	Research Ethics	15	1	0	1	4	5	75	1	3
MEDC 107	Creativity, Innovation and Entrepreneurship	15	1	0	1	4	5	75	1	3

رابعاً : مقررات طبية متنوعة

Code	Title	Weeks	Didactic Hours	Practical Hours	Contact Hours	Self Study Hours	Workload	Student Workload	Credit Hours	Credit Points
MEDC 401	Stem Cell Applications and Tissue Engineering	15	1	0	1	4	5	75	1	3
MEDC 402	Laser, Endoscopy and Robotic Surgery	15	1	0	1	4	5	75	1	3
MEDC 403	Infection Control and Hospital Acquired Infection	15	1	0	1	4	5	75	1	3
MEDC 404	Medical Ethics and Malpractice	15	1	0	1	4	5	75	1	3
MEDC 405	Molecular Biology and Gene Therapy	15	1	0	1	4	5	75	1	3
MEDC 406	Interventional Radiology, PET-CT and Image-guided Surgery	15	1	0	1	4	5	75	1	3
MEDC 407	Clinical Psychology	15	1	0	1	4	5	75	1	3

**Program specifications: Medical Parasitology Doctorate Degree, 2016-2017**

ثالثاً : مقررات في أساسيات الإدارة

Code	Title	Weeks	Didactic Hours	Practical Hours	Contact Hours	Self Study Hours	Workload Hours	Student Workload	Credit Hours	Credit Points
MEDC 301	Human Resources Management	15	1	0	1	4	5	75	1	3
MEDC 302	Total Quality Management	15	1	0	1	4	5	75	1	3
MEDC 303	Hospital Management	15	1	0	1	4	5	75	1	3
MEDC 304	Crisis Management and Stress Management	15	1	0	1	4	5	75	1	3
MEDC 305	Organizational Behavior and Leadership	15	1	0	1	4	5	75	1	3
MEDC 306	Strategic Planning and Organizational Structure	15	1	0	1	4	5	75	1	3
MEDC 307	Change Management and Conflict Management	15	1	0	1	4	5	75	1	3

رابعاً : مقررات طبية متنوعة

Code	Title	Weeks	Didactic Hours	Practical Hours	Contact Hours	Self Study Hours	Workload Hours	Student Workload	Credit Hours	Credit Points
MEDC 401	Stem Cell Applications and Tissue Engineering	15	1	0	1	4	5	75	1	3
MEDC 402	Laser, Endoscopy and Robotic Surgery	15	1	0	1	4	5	75	1	3
MEDC 403	Infection Control and Hospital Acquired Infection	15	1	0	1	4	5	75	1	3
MEDC 404	Medical Ethics and Malpractice	15	1	0	1	4	5	75	1	3
MEDC 405	Molecular Biology and Gene Therapy	15	1	0	1	4	5	75	1	3
MEDC 406	Interventional Radiology, PET-CT and Image-guided Surgery	15	1	0	1	4	5	75	1	3
MEDC 407	Clinical Psychology	15	1	0	1	4	5	75	1	3

**9-we certify that all of the information required to deliver this program is contained in the above specifications and will be implemented**

We verify that the above program and the analysis of students and external evaluator opinions are accurate.

Program coordinator and head of department

name.....signature.....Date.....

Head of quality assurance unit:

name.....signature.....Date.....